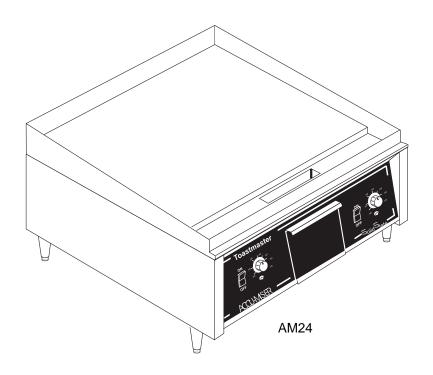
## Toastmaster<sub>®</sub>

A Middleby Company

# OWNER'S OPERATING & INSTALLATION MANUAL

## AM24, AM36 & AM48 ACCU-MISER GRIDDLES



**Toastmaster**® • 1400 Toastmaster Drive • Elgin, IL 60120 • (708)741-3300 • FAX (708)741-4406 A Middleby Company

## Toastmaster® GRIDDLE LIMITED WARRANTY

All equipment manufactured by Toastmaster Commercial which is sold under the "Toastmaster" trademark and used for commercial purposes is warranted against defects in materials and workmanship. The warranty period runs 12 months from the original date of installation. This 12 month warranty period may not run beyond 18 months from the original date of purchase and is for the benefit of the original purchaser only. ALL OTHER WARRANTIES, EXPRESS OR IMPLIED, STATUTORY OR OTHERWISE, INCLUDING WITHOUT LIMITATION ANY IMPLIED WARRANTY OR MERCHANTABILITY OR FITNESS FOR PURPOSE ARE EXCLUDED. Seller shall in no event be liable for direct, indirect or consequential damages in connection with Toastmaster Commercial products.

Seller's obligation under this warranty is limited to the repair of defects without charge, by a factory authorized service agency or one of its sub-service agencies. Such repair service will be provided on customer's premises except in the case of portable products.

Models that are considered portable (devices with cord and plugs) including conveyor toasters must be taken or shipped to the closest authorized service agency, transportation charges prepaid.

This warranty is not effective if damage occurs because of accident, carelessness, improper installation, lack of proper set-up supervision when required or because equipment is installed on a different voltage, steam or gas service then designated on the equipment nameplate, or if the equipment is installed or operated in any manner contrary to the installation and operation instructions. In these cases, repairs will be made at a reasonable cost. Work performed by unauthorized personnel or service agencies voids this warranty.

Authorized service agencies are located in principal cities throughout the world. Please consult your classified telephone directory, your food service equipment distributor, or write the Factory Service Department, **Toastmaster**®, 1400 Toastmaster Drive, Elgin, Illinois 60120, for information and other details concerning service of this warranty.

#### IN CASE OF FIRE

- 1. De-energize griddle at disconnect switch. This will cut off power to the heating elements allowing griddle to cool. This reduces the flash point temperature making it easier to stop the fire.
- 2. Cover the affected area with a heavy blanket or canvas. Play the fire extinguisher nozzle over the blanket or cover to seal off air thus smothering the fire.

#### **CAUTION:**

Do not attempt to fight a grease fire by playing the nozzle of the fire extinguisher directly on the burning grease. The force will cause the burning grease to be sprayed to adjoining equipment making it difficult to contain the fire. Only use a fire extinguisher filled with CO<sub>2</sub> which is for liquids and oils and suitable for electric powered equipment.

#### RETAIN THIS MANUAL FOR FUTURE REFERENCE

This manual provides detailed information for installation and operation of your new Accu-Miser griddle. It also contains some information to assist the operator in diagnosing problems in the event of a malfunction. This manual is an important tool for the operator and should be kept readily available.

FOR YOUR SAFETY
DO NOT STORE OR USE GASOLINE
OR OTHER FLAMMABLE VAPORS OR LIQUIDS
IN THE VICINITY OF THIS OR ANY OTHER APPLIANCE

#### NOTICE

Using any parts other than genuine Toastmaster factory parts relieves the manufacturer of all liability.

#### NOTICE

Toastmaster (Manufacturer) reserves the right to change specifications and product design without notice. Such revisions do not entitle the buyer to corresponding changes, improvements, additions or replacements for previously purchased equipment.

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## SECTION 1 DESCRIPTION

#### ACCU-MISER (AM) SERIES GRIDDLES ARE:

- Electrically heated
- Counter top mounted
- · Heated by infrared emitter panels
- · Thermostat solid state controller

#### **MODELS:**

- AM24 (24" wide)
- AM36 (36" wide)
- AM48 (48" wide)

#### **INFRARED HEAT PANELS.**

The griddle employs infrared cooking technology. Infrared heat panels are placed below the griddle plate. These panels are 12" wide, which means an AM24 will accommodate 2 panels, an AM36 will accommodate 3 panels and etc. A thermostatic solid state controller for each 12" zone accurately maintains set griddle cooking temperatures for consistent and repeatable results. The thermostats have a range of 150°F (83°C) to 450°F (232°C). The griddle provides uniform heat distribution across the griddle surface.

#### **FEATURES:**

- · Griddle On/Off switch.
- Thermostat Control with Heating Indicator Light (Red).
- The griddle features stainless steel front, sides and back.
- The griddle is equipped with a grease trough and a large grease drawer.
- The Toastmaster® AM Series Griddles are supplied with four 4" adjustable legs.

**IMPORTANT!**: For all installations the legs or the optional stand must be used to validate the warranty.

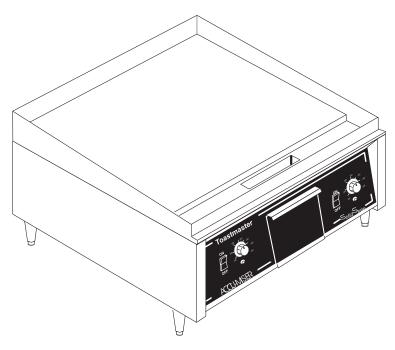


Figure 1-1

#### **Component Location**

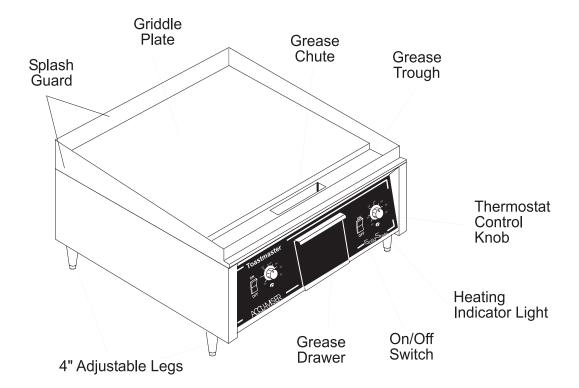


Figure 1-2

NOTICE

Toastmaster (Manufacturer) reserves the right to change specifications and product design without notice. Such revisions do not entitle the buyer to corresponding changes, improvements, additions or replacements for previously purchased equipment.

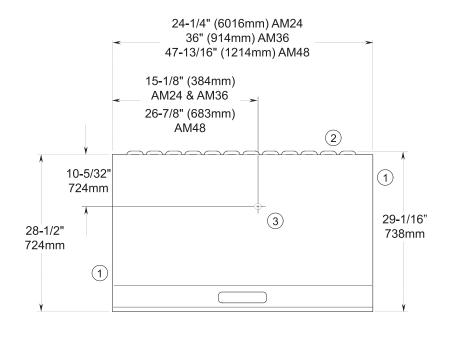
	M Series Grid	Idles Specification Chart
		•
Griddle Plate Dimensions -	AM24	23-7/8" (606 mm) W x 24" (610 mm) D
	AM36	35-7/8" (911 mm) W x 24" (610 mm) D
	AM48	47-3/4" (1213 mm) W x 24" (610 mm) D
Overall Dimensions -	AM24	24" (610 mm)W x 28-1/2" (724 mm)D x 15" (381 mm)H
	AM36	36" (914 mm)W x 28-1/2" (724 mm)D x 15" (381 mm) H
	AM48	47-15/16" (1218 mm)W x 28-1/2" (724 mm)D x 15" (381 mm) H
Net Weight -	AM24 AM36 AM48	120 lbs. (54 kgm) 222 lbs. (101 kgm) 275 lbs. 125 kgm)
Shipping Weight -	AM24 AM36 AM48	140 lbs. (63 kgm) 242 lbs. (110 kgm) 300 lbs. (136 kgm)
Shipping Dimensions -	AM24	28-1/2" (724 mm)W x 33-1/2" (851 mm)D x 17-1/2" (445 mm)H
	AM36	40-1/2" (1029 mm)W x 33" (838 mm)D x 16-1/2" (419 mm) H
	AM48	52-1/2" (1334 mm)W x 31-1/2" (800 mm)D x 16-1/2" (419 mm) H
Average Operating kw		Refer to Electrical Data Chart on following page
Allowable Temperature Ranges		150°F (83°C) to 450°F (232°C)
Heat Source		Infrared heat emitter panels One 12" emitter panel for each 12" of griddle width
Griddle		3/8" thick, uniform heat distribution design
Grease Trough		3-1/2"
Outer Body Steel		Front, 16 gauge stainless steel Sides, 20 gauge stainless steel

#### **Griddle Electrical Specification Chart**

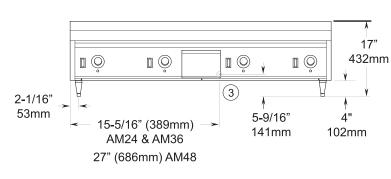
	Voltage	Total	Loading kW/Phase		pading kW/Phase Nominal Amps/Line Wire		Minimum Supply Wire (AWG) Gauge*		Breaker Rating*				
		kW	3 Ph		3 Ph		1 Ph	3 Ph	1 Ph	3 Ph	1 Ph		
			X-Y	Y-Z	X-Z	Х	Υ	Z					
AM24	208 240	6.2 6.2	3.1 3.1	3.1 3.1		15.0 13.0	26.0 22.5	15.0 13.0	30.0 26.0	10 10	8 10	25 30	30 30
AM36	208 240	9.3 9.3	3.1 3.1	3.1 3.1	3.1 3.1	26.0 22.5	26.0 22.5	26.0 22.5	45.0 39.0	10 10	6 8	25 30	40 45
AM48	208 240	12.5 12.5	6.2 6.2	3.1 3.1	3.1 3.1	39.7 35.9	39.7 35.9	26.0 22.5	60.1 52.0	8 8	4 6	35 40	50 60

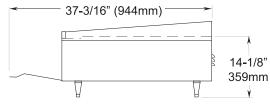
<sup>\*</sup> Provided for reference only. Consult national or local electrical codes.

#### **Griddle Dimension Drawing**



- 1" (25mm)minimum clearance from side wall
- 2 1/2" (13mm) minimum clearance from back wall
- 3 Electrical knockout located at rear and in bottom of grill.





#### **NOTES**

## SECTION 2 INSTALLATION

#### A. Inspect for Shipping Damage

All shipping containers should be examined for damage before and during unloading. This equipment was carefully inspected and packaged at the factory. The freight carrier has assumed responsibility for its safe transit and delivery. If equipment is received in damaged condition, either apparent or concealed, a claim must be made with the delivering carrier.

- 1. Apparent Damage or Loss If damage or loss is apparent it must be noted on the freight bill or express receipt at the time of delivery, and it must be signed by the carrier's agent (driver). If this is not done, the carrier may refuse the claim. The carrier will supply the necessary claim forms.
- 2. Concealed Damage or Loss If damage or loss is NOT apparent until after equipment is uncrated, a request for inspection of concealed damage must be made with carrier within 15 days. The carrier will make an inspection and will supply necessary claim forms. Be certain to retain all contents plus external and internal packaging/crating materials for inspection.

#### B. Unpacking Griddle

- 1. The griddle will be delivered in a carton on a wooden pallet. Cut the banding straps that hold the carton in place and lift the carton up and off of the griddle.
- 2. Carefully turn the griddle upside down and remove the bolts that secure the pallet to the griddle.

Remove the pallet and discard.

#### C. Installing Griddle on Counter.

**NOTE:** If you are installing the griddle on an accessory stand go to Step D.

#### 1. Installing Legs

Locate the four NSF approved 4" adjustable legs in the grease drawer.

With the grill still turned upside down install the four legs by threading them into the weldnuts on the leg mounting plates. Tighten the legs securely.

#### 2. Leveling Griddle

Carefully lift the griddle onto its legs and place it on the counter in its permanent position. Level the griddle using a common carpenters level. Adjust the foot portion of the adjustable legs to level the griddle front-to-back and side-to-side.

#### D. Installing Griddle on Accessory Stand.

NOTE: If you are installing the griddle on a counter do not do Step D. Go directly to Step E.

Accessory stands are available for all Accu-Miser Griddles. See the following Accessory Stand List.

#### **GRIDDLE ACCESSORY STAND LIST**

Griddle Model Number	Accessory Number	Description
AM24	7324ES	Stand. Mount on 6" casters not included.
AM36	7336ES	Stand. Mount on 6" casters not included.
AM48	7348ES	Stand. Mount on 6" casters not included.
All Models	ACCS06J	Casters. Set of four, NSF approved, adds 6-1/4" to height of unit. 2 locking casters and 2 non-locking casters.

#### Stand Assembly:

- 1. Unpack the stand which is made up of two sets of legs.
- 2. Assemble the casters into the legs. The casters without brakes are installed on the rear legs and the casters with brakes are installed on the front legs.

Install the casters as follows (refer to Figure 2-1):

- a. Before inserting the caster into the leg, snug the knurled knob until the caster fits snugly into leg tube.
- b. Insert caster into leg.
- c. Tighten main bolt located under caster 1 to 2 turns.

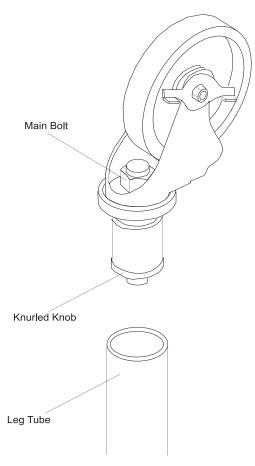


Figure 2-1

3. Turn stand right side up and secure to griddle with 3/8-16 bolts and lockwashers as shown in Figure 2-2. **NOTE:** Be sure the casters with brakes are located at the front of the griddle.

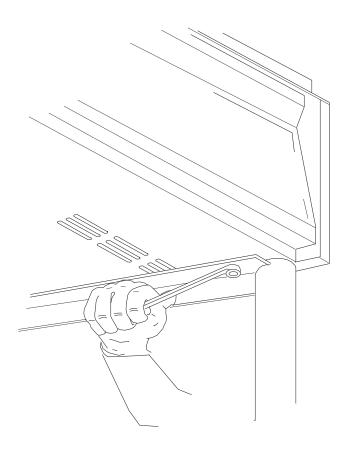


Figure 2-2

#### E. Electrical Connection

Be sure your electrician provides the proper wire gauge with a capacity for carrying the voltage required. Wire capacity is listed on the serial number data plate. Wire capacity and electrical specifications are listed in Section 1 of this manual. Also check local and state codes for proper wire size.

The incoming power wires from the circuit breaker box to the griddle are inserted into the rear or bottom of the griddle as shown below.

The location of the main terminal block is shown below. For access to the terminal block remove the grease drawer, open the door and then slide the drawer channel out as shown below. Connect the wires as shown on the electrical schematic in Section 5 of this manual.

No internal fusing is provided on countertop griddles. Therefore the installing contractor must provide the proper disconnect as may be required by state and local codes.

#### **CAUTION:**

Be sure the main power disconnect switch is in "OFF" position before attempting to make any electrical connections.

Be sure all electrical connections are tight and are positioned so they will not short out.

**IMPORTANT:** All griddles are factory wired for 3 Ph and must be rewired during installation for 1 Ph connection. The wiring for 1 Ph connection and 3 Ph connection for all models is shown on the Schematics in Section 5 of this manual.

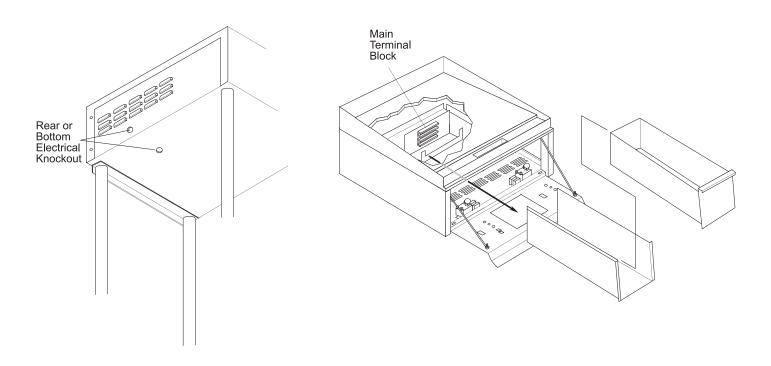


Figure 2-3

#### F. Initially Clean the Griddle

- 1. Clean the rust preventive material from the griddle surface with a non-flammable grease solvent.
- 2. Wash the griddle with warm water and a mild detergent.
- 3. Rinse with a damp cloth and wipe dry.

#### G. Test the Installation, refer to Figure 3-2

NOTE: The griddle must be initially cleaned as directed in Step F before completion of Step G.

- 1. Turn all rocker On/Off switches to the "Off" position.
- 2. Turn all thermostat control knobs to the lowest temperature setting.
- 3. Turn the main power disconnect switch to "ON".
- 4. Turn "On" the On/Off switch located at the left end of the griddle. Then turn the corresponding left thermostat control knob to 200°F (93°C) and check that heating light located below control knob illuminates. Wait a few minutes and check to see if the left section of the griddle has heated. Then wait a few more minutes and check that the heating light goes off when the section of the griddle reaches set temperature. Turn the temperature control knob back to its lowest position and turn the On/Off Switch back to "Off".
- 5. Move to the next rocker On/Off switch and thermostat control knob and repeat Step 4. Continue until the entire griddle has been tested.

### **NOTES:**

## SECTION 3 OPERATION

#### I. Location and Function of Controls

The following information provides a basic description of the griddle operator components, their location and the function they perform.

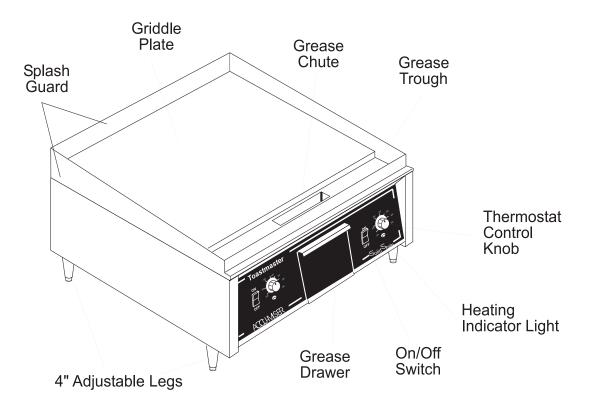


Figure 3-1 Operator Components

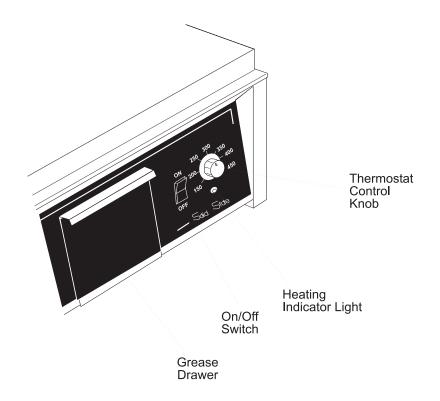


Figure 3-2 Control Panel

#### A. CONTROLS

All oven operating controls are on the control panel.

- Thermostat Control Knob The thermostat control knob is used to adjust the corresponding element section above it to your temperature requirements. The maximum set point is 450°F (232°C), the minimum set point is 150°F (65°C).
- **Heating Indicator Light** Located below each thermostat control the heating indicator light will be lit whenever the adjacent griddle section is calling for heat. The light will go off when the griddle section has reached the temperature set on the thermostat control knob.
- **On/Off Switch** Located on the control panel the On/Off switch(es) turn the corresponding element section above it on and off.

IMPORTANT: Do not turn griddle on until procedures in Step B have been completed.

#### B. Seasoning the Griddle

- 1. Preheat the griddle to 300°F (149°C) and spread a light film of unsalted cooking oil or fat over the surface with a soft cloth.
- 2. Allow griddle to stand this way for two minutes to give the oil an opportunity to work into the pores of the metal and to form a smooth coating over the outside.
- 3. Wipe off excess oil and repeat Steps 1 and 2 at 350°F (175°C).
- 4. After the second step is completed wipe off excess cooking oil, set thermostat control knob for desired temperature. The griddle is now ready for use.

#### C. Operating Hints and Safety

Although the finest materials, engineering planning and manufacturing facilities have provided for safety and trouble-free operation only proper use and maintenance will assure personnel safety and long life of the equipment. The following are a few precautions and operating suggestions for use of the griddle.

- 1. Disconnect power to the griddle at the disconnect switch at the end of each day of operation.
- 2. Do not leave griddle in operation without an attendant.
- 3. Turn thermostat dials down to 200°F (93°C) during idle periods. It takes only a few minutes to regain operating temperatures.
- 4. Do not heat the entire griddle for cooking small amounts of food.
- 5. Various kinds of food can be cooked at the same time by setting each section of the griddle at different temperatures.
- 6. Use a spatula to push excess grease into grease trough after each load of food is cooked. This will reduce smoking of hot grease and carbonizing.
- 7. Do not leave griddle at high temperature when not in use or during idle periods. This will cause food particles and grease film to carbonize.

#### **D. Daily Operation And Maintenance**

#### **Daily Pre-Operation:**

- 1. Season the griddle before operation daily as described in Step B above.
- 2. Always allow 15 minutes of preheat time before loading griddle with food. This will allow time for the griddle surface to be saturated with heat. Failure to allow sufficient preheat time will result in unsatisfactory cooking of the first load. The following chart indicates cooking time and temperature for various types of food.

#### **Daily Post-Operation:**

#### 1. Cleaning the Griddle Surface

**a.** Good cooking requires clean equipment. To provide evenly cooked and perfectly browned foods, keep the griddle surface free of carbonized grease. Carbonized grease on griddle surface hinders the transfer of heat from the griddle surface to the food. This also results in spotty browning, loss of cooking efficiency, and worst of all, carbonized grease tends to cling to the griddled foods, giving them a highly unsatisfactory and unappetizing appearance.

#### **SECTION 3 - OPERATION**

- **b.** At the end of each day of operation or at the end of each shift thoroughly clean the grease trough and the spout into grease drawer.
- **c.** Clean the griddle surface with a pumice or griddle stone by rubbing with the grain of the metal while the griddle surface is still warm.
- d. Wipe griddle clean of residue from the griddle stone
- **2.** Cleaning the exterior Wipe down sides of griddle and all areas around griddle to keep them free of splashed grease.
  - a. Clean all surrounding surfaces of the griddle with warm water and a mild detergent daily.
  - **b.** Rinse and wipe off excess water.
  - c. Polish with a dry soft cloth.

**NOTE:** This simple treatment not only keeps the equipment dirt free and sparkling, it also eliminates the danger of grease accumulation forming hard to remove stains.

3. Cleaning the grease drawer- Empty grease drawer as often as necessary, but be it must be emptied at the end of each day of operation or the end of each shift. Also wash out grease drawer with hot water and a mild detergent. Wipe dry and replace in griddle.

#### E. Operation Troubleshooting

- 1. Griddle not heating.
- 1. Check that incoming power electrical disconnect switch is turned on.
- 2. Griddle zone not heating.
- 2. Check that corresponding rocker switch is turned on.

Check that thermostat is set to proper temperature.

If unit still does not operate contact your local Toastmaster Service Representative.

#### F. Time and Temperature Guide

**NOTE:** All cooktimes are approximate.

FOOD	CONTROL SETTING	TIME IN MINUTES	ADVANCE PREPARATIONS
Canadian Bacon	350°F(176°C)	3 to 4	Slice (not too far in advance as meat will darken)-Split edges to prevent curling.
Hamburgers	350°F(176°C)	3 to 4	Prepare recipe - Form patties - Separate with waxed paper - Refrigerate.
Cheeseburgers	350°F(176°C)	3 to 4	A hamburger patty plus melt a slice of cheese on top just before serving.
Corned Beef Patties	375°F(190°C)	3 to 4	Open both ends of can - Slide out contents of can - Cut into 3/8" slices.
Sausage Patties	350°F(176°C)	3 to 4	Form patties - Separate with waxed paper - Refrigerate.
Sausage Links	350°F(176°C)	3	Refrigerate for best results.
Potato Patties	375°F(190°C)	3 to 4	Cook - Mash - Season - Form patties using 1/4 cup measure.
American Fried Potatoes	375°F(190°C)	3 to 4	Cook - Slice - Season.
French Toast	400°F(204°C)	4 to 5	Prepare egg batter.
Scrambled Eggs	300°F(149°C)	3 to 4	Prepare recipe.
Pancakes	375°F(190°C)	2	Prepare recipe.
Frankfurters	375°F(190°C)	2 to 5	
Minute Steaks	400°F(204°C)	3 to 4	
Club Steaks	400°F(204°C)	3 to 5	
Ham Steaks	400°F(204°C)	10	
Beef Tenderloin	400°F(204°C)	5 to 7	
Boiled Ham	375°F(190°C)	2	
Bacon	350°F(176°C)	6	
Hard Fried Eggs	300°F(149°C)	3	
Soft Fried Eggs	300°F(149°C)	2	
Sunny-Side-Up Eggs	300°F(149°C)	3	

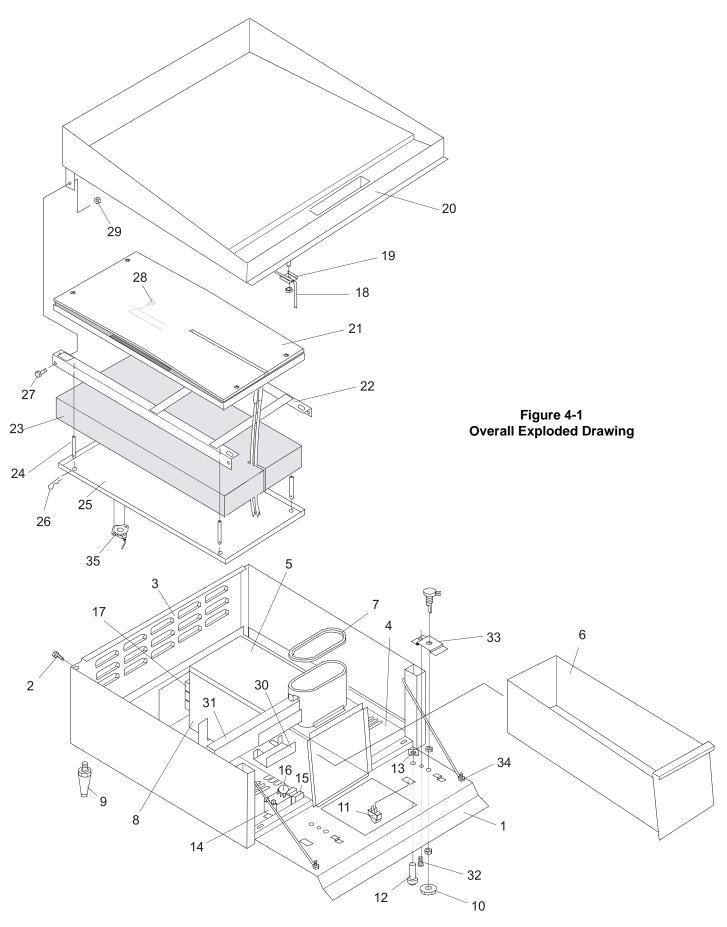
#### **SECTION 3 - OPERATION**

#### **G.** Cooking Capacities

**NOTE:** All production capacities are approximate.

MODEL	LOAD	CAPACI	ГҮ	CAPACI	TY PER H	IOUR
	HAMBURGERS	EGGS	4 "PANCAKES	HAMBURGERS	EGGS	4" PANCAKES
AM24	40	37	33	884	975	644
AM36	60	56	48	1326	1456	936
AM48	80	75	66	1768	1950	1287

## SECTION 4 PARTS LIST

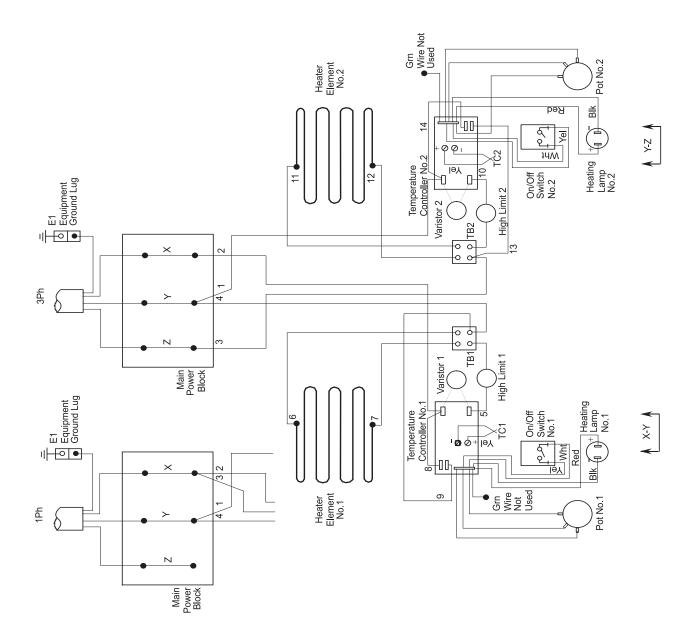


#### Parts List for Figure 4-1 Overall Exploded Drawing

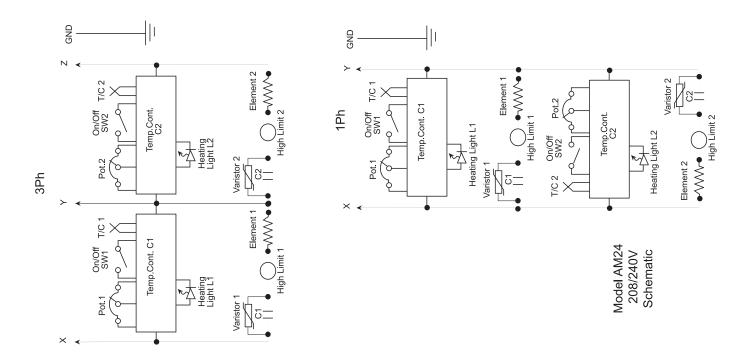
		AM24		AM36	AM48		
Item #	Qty	Part #	Qty	Part #	Qty	Part #	Description
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 31 32 33 34 35	1 4 1 1 1 1 1 1 1 4 2 2 2 2 2 1 2 2 2 2	30979 2000620 31183 30972 30977 30987 2700090 30976 3101908 31154 19A1S145 3003188 3A81D8801 3004290 3003993 97415 3003992 3004289 7007918 31160 7610644 7610831 7610637 2500132 7007920 31182 2002499 7007923 7007916 2001416 7610628 2500130 4141A8803 31187 2001371 31646	1 4 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	30988 2000620 31295 30987 30977 30987 2700090 30976 3101908 31154 19A1S145 3003188 3A81D8801 3004290 3003993 97415 3003992 3004289 7007918 31198 7610644 7610831 7610637 2500132 7007920 31182 2002499 7007923 7007916 2001416 7610628 2500130 2500133 4141A8803 31187 2001371 31646	1 4 1 1 1 1 1 1 1 4 4 4 4 4 4 4 4 4 4 4	30992 2000620 31210 30991 30977 30987 2700090 30976 3101908 31154 19A1S145 3003188 3A81D8801 3004290 3003993 97415 3003992 3004289 7007918 31207 7610644 7610831 7610637 2500132 7007920 31182 2002499 7007923 7007916 2001416 7610628 2500133 4141A8803 31187 2001371 31646	Front Panel Assembly Screw, #6 x 1/2 SHWHSM Cover, Back Cover, Bottom Cover, Enclosure Assembly Drawer Assembly Gasket, Grease Spout Enclosure 4" Adjustable Leg Knob, Temp. Control Switch, On/Off Light Tinnerman Clip Controller w/Potentiometer Terminal Block Varistor Power Terminal Thermocouple Bracket, Thermocouple Griddle Plate Weldment Heater Assembly, 208V Heater Assembly, 240V Frame Support, Heater Assembly Insulation, 1-1/2" Thick Stand-Off Package Cover Cotter, Hairpin Shoulder Screw Shoulder Screw Nut Support, Insul. Block Ass'y Insulation, Short Strip Insulation, Long Strip Screw Bracket, Pot Nut High Limit

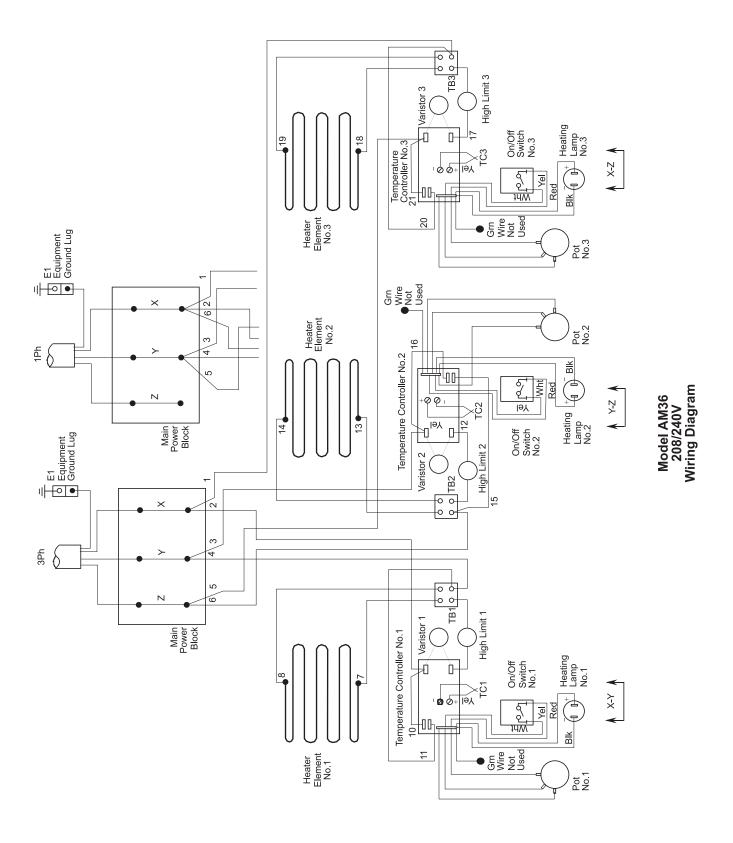
### **NOTES:**

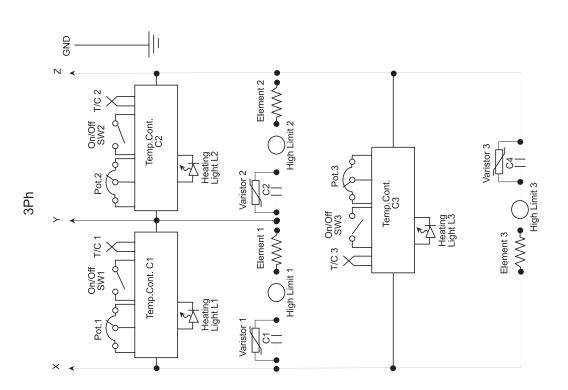
## SECTION 5 SCHEMATICS



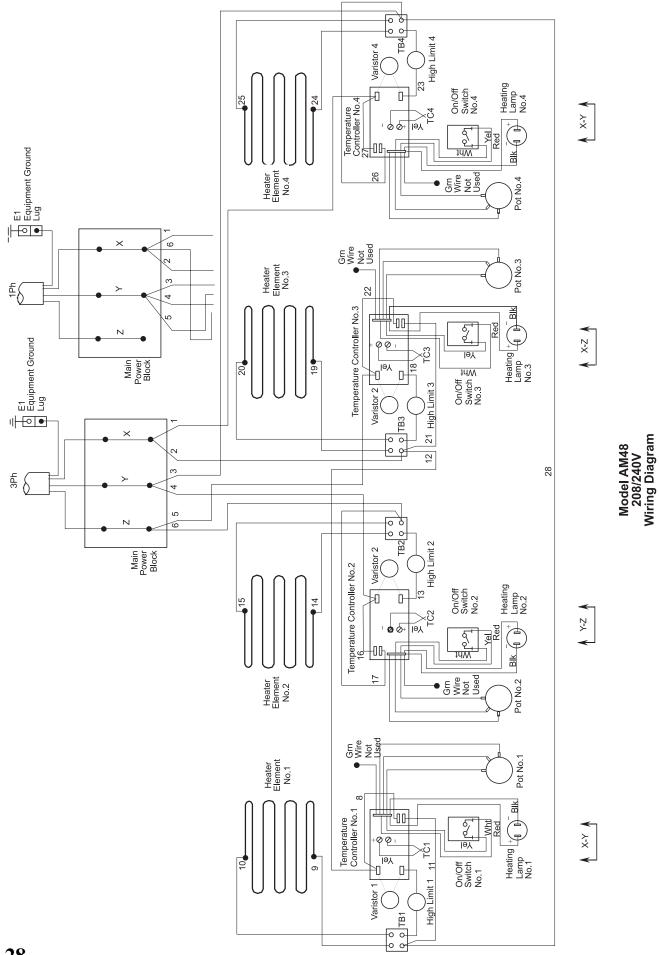
Model AM24 208/240V Wiring Diagram

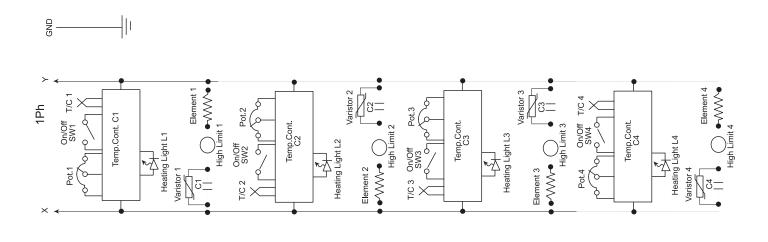






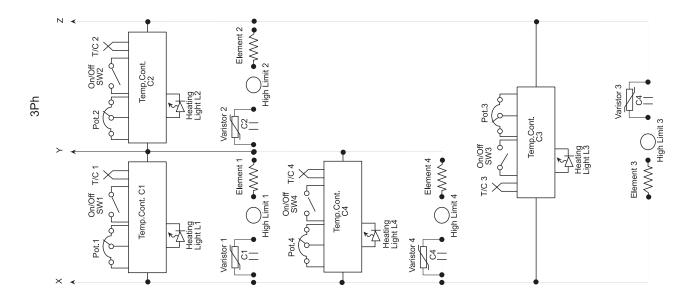
Model AM36 208/240V Schematic





Model AM48 208/240V Schematic





For more information on the complete line of **Toastmaster**® products, contact your Food Service Equipment Dealer, or write to us at the address below.

#### **Toastmaster®**

A Middleby Company

Middleby Corp 24 Hour Service Hotline 1-800-238-8444

**Toastmaster®**1400 Toastmaster Drive
Elgin, IL 60120
(708)741-3300

Part No. 3102549 Price \$15.00